

ABSTRACT OF THE DISCLOSURE

A method and apparatus for reducing signal distortion in a high speed data communications system caused by a flux imbalance in a system coupling transformer. The signal distortion is monitored by a combination echo canceller
5 circuit connected to the equipment side winding of the transformer, thereby generating an error signal. Changes in the error signal are used by a flux controller to provide a flux cancellation signal. The flux cancellation signal is added with the data signal to generate an offsetting flux signal to the transformer.